

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB 03/04267

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G11B19/26 G11B19/247 G11B7/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G11B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 561 644 A (KONDO MASAMICHI) 1 October 1996 (1996-10-01) cited in the application the whole document ---	1,10
A	PATENT ABSTRACTS OF JAPAN vol. 018, no. 412 (P-1780), 2 August 1994 (1994-08-02) & JP 06 119710 A (HITACHI LTD), 28 April 1994 (1994-04-28) abstract ---	1,10
A	US 6 172 946 B1 (FURUKAWA SHIGEAKI ET AL) 9 January 2001 (2001-01-09) -----	

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Date of the actual completion of the international search

10 December 2003

Date of mailing of the international search report

17/12/2003

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Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 5561644	A	01-10-1996	WO KR	9419800 A1 175655 B1		01-09-1994 15-04-1999
JP 06119710	A	28-04-1994		NONE		
US 6172946	B1	09-01-2001	JP KR	10011890 A 234961 B1		16-01-1998 15-12-1999